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UiTM SEBUAH UNIVERSITI

UNIVERSITI TEKNOLOGI MARA

20 & 21 MAY 2024

IRAX

International Industrial Revolution 4.0 Exposition

"INNOVATING IDEAS, TRANSPIRING DREAMS"

ABSTRACT BOOK

Strategic Partners:

UST

Perpustakaan Sultan Badlishah
UNIVERSITI TEKNOLOGI MARA

Organized By:

COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS, UNIVERSITI TEKNOLOGI MARA, KEDAH BRANCH

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IREx 2024

The successful inauguration of IR4.0 Exposition IREx 2019 has witnessed ground breaking initiatives, ideas, and innovations materialised into numerous practival devices today. Treading on the same triumph, the College of Computing, Informatics, and Mathematics, UiTM Kedah is thrilled to announce the continuation of said event, IREx 2024 with the theme: *Innovating Ideas, Transpiring Dreams*.

The IREx 2024 aspires to incorporate even more exciting new technologies including, but not limited to, Information & Communication Technology (ICT), Educational Technology & Innovation (ED), Operational Excellence (OE), Internet of Things (IoT), Process Improvement, Ideas & Design, Multimedia, and Electronics that will chart new milestones in human history. This will serve as an excellent platform for scientists and innovators alike to meet the like-minded individuals and showcase inspiring ideas and notable innovations.

PROGRAM SCHEDULE

International Industrial Revolution 4.0 Exposition (IREx 2024)
21ST May 2024 (Tuesday)
Dewan Perdana, UiTM Kedah Branch

TIME	EVENT
8.00 – 9.00 am	Registration & Booth Set Up
9.00 am – 12.00 pm	Exhibition & Judging Session
12.00 pm – 2.00 pm	Obedient Drone Session & Break
2.00 pm – 5.00 pm	Official Closing & Prize Giving Ceremony
5.00 pm	Program Ends

Official Closing Ceremony

International Industrial Revolution 4.0 Exposition (IREx 2024)

TIME	EVENT
2.00 pm	Arrival of Guests and Participants
2.30 pm	Arrival of VVIP
2.40 pm	National anthem - Negaraku And Wawasan Setia Warga UiTM
3.00 pm	Welcoming Speech Rector's Welcoming Speech
3.10 pm	Officiating Speech Gimmick & Montage presentation
3.30 pm	Prize Giving Ceremony
4.00 pm	Photography
5.00 pm	Program Ends

CATEGORY C

CATEGORY C

DYNAMIC EXRATE: UNVEILING INSIGHTS INTO CURRENCY CIRCULATION AND EXCHANGE RATES IN THE DIGITAL AGE THROUGH BIG DATA ANALYSIS

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ABSTRACT - The processes of monetary policy expand more complicated as digital transactions increase, requiring a detailed understanding of their effects on exchange rates. Despite the generally accepted perception of these situations and the role of currency circulation in economic frameworks, there are critical aspects of this dynamic relationship that remain undiscovered due to current research limitations. Thus, this study intends to bridge the knowledge gap by examining the dynamic relationships and patterns that standard research could miss through big data analysis. Concerning this, this study aims to examine patterns in the distribution of physical currency to understand how central banks utilize big data analysis tools to execute monetary policies. Then the trends in currency circulation over the specified period is analyzed by identifying key factors influencing these patterns. Finally Dynamic ExRate, a dashboard that visualize the forecast exchange rate movements between Malaysia and other nations into potential shifts in economic relationships had been developed. Early findings indicate that Dynamic ExRate, provide deep insights from big data analysis, that can greatly improve the understanding of the processes. By highlighting the changing topography of monetary policies, the significant outcome from this study offers insightful information to economists, analysts, and policymakers who are attempting to navigate the complexities of modern systems.

Keywords: Big Data Analysis, Currency Circulation, Exchange Rates, Monetary Policy

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